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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/828,122	04/09/2001	Gary M. Katz	PIP-69B-KATZ	5972
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NEIFELD IP LAW, PC 2001 JEFFERSON DAVIS HIGHWAY ARLINGTON, VA 22202			RETTA, YEHDEGA	
			ART UNIT	PAPER NUMBER
			3622	
DATE MAILED: 12/13/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/828,122

Applicant(s)

KATZ, GARY M.

Examiner

Yehdega Retta

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --.

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

This office action is responsive to amendment filed September 28 and September 30, 2004. New claims 30-58 have been added. Claims 1-58 are now pending in this application.

Claim Rejections - 35 USC § 101

Claims 1-19, 26, 28, 35-40 and 53-56 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological art; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the “progress of science and the useful arts” (i.e., the physical science as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For the process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

The independently claimed steps of receiving, determining, selecting and pairing information do not require structural interaction or mechanical intervention such that the invention falls within the technological arts permitting statutory patent protection. The claimed step of receiving, determining, selecting and pairing information does not apply, involve, use or

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advance the technological arts since all of the recited steps can be performed in the mind of user or by use of a pencil and paper. Claims reciting those steps can be performed by interpersonal communications such that the claimed steps can be performed without a physical structure or mechanical object. The method only constitutes an idea of pairing promotions.

As the technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or filed of use) or mere implications of employing a machine or article or manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble. Nothing in the body of the claim, recites any structure or functionality to suggest that a computer performs the recited steps. Therefore, the preamble is taken to merely recite a field of use.

Additionally, for a claimed invention to be statutory the claimed invention must produce a useful, concrete and tangible result. In the present case, the claimed invention produces promotion (i.e., repeatable) prediction (i.e., useful and tangible). Although the recited process produces a useful, concrete and tangible result, since claimed invention, as a whole, is not with the technological art as explained above, the claims are deemed to be directed to non-statutory matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who

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has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1- 58 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Deaton et al. 6,334,108.

Regarding claim 1, Deaton teaches receiving identification information; determining a purchase history based upon the identification information, selecting a second promotion determined to be more relevant and pairing the promotions (see fig. 43 and col. 119 and col. 149 line 43 to col. 150 line 18).

Regarding claims 2 and 3, Deaton teaches frequency of purchases or number of purchase (see col. 147 line 45 to col. 149 line 15).

Regarding claim 4, Deaton teaches receiving identification, determining promotion usage denominator using the received information; selecting a second promotion based upon promotion usage denominator and pairing the two promotions (see fig 38 and col. 97 line 39 to col. 98 line 31).

Regarding claims 5 and 6, Deaton teaches the usage denominator relates to a value of promotions and the location of the promotions exercised by consumer (see col. 115 lines 41 to col. 116 line 21 and fig. 43-45).

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Regarding claims 7-19, Deaton teaches receiving identification information; determining a demographic characteristic based upon the identification information, selecting a second promotion determined to be more relevant and pairing the promotions ... (see fig. 43-45, col. 63 lines 7-67 and col. 119 and col. 149 line 43 to col. 150 line 18).

Claims 20 and 21 are rejected as stated above in claim 1.

Claims 22 and 23 are rejected as stated above in claim 4.

Claims 24 and 25 are rejected as stated above in claim 7.

Regarding claim 26 and 27, Deaton teaches receiving promotion information regarding first low relevance and second promotion, pairing the promotions and identifying the customer likely to exercise said second promotion and providing the consumer with the paired promotions (see fig. 43-45 and col. 118 line 65 to col. 123 line 23).

Regarding claims 28 and 29, Deaton selecting a first promotion determined to be more relevant to a consumer based on purchase history data; determining a second promotion determined to be less relevant to said consumer based upon said purchase history data; pairing said first promotion with said second promotion; and providing the paired promotions to said consumer (see fig. 43-45 and col. 118 line 65 to col. 123 line 23).

Regarding claims 30-34, Deaton teaches the determining and selecting is computer implemented (see fig 1-3).

Regarding claims 35-58, Deaton teaches exercising the low relevance and the second promotion and displaying together both promotion (see col. Fig 32-34).

Response to Arguments

Applicant's arguments filed September 28, 2004 have been fully considered but they are not persuasive. In response to applicant's argument regarding the rejection of 35 U.S.C. 101. Examiner responses;

Regarding the requirement under 35 U.S.C. § 101 that a claimed invention be limited to the technological arts in order to be deemed statutory and in response to Appellant's arguments, the Examiner submits that the phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts." See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts."

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature," "natural phenomena," and "abstract ideas." See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998). This addresses the second test under 35 U.S.C § 101 of whether or not an invention is eligible for a patent. The Manual of Patent Examining Procedure reiterates this point. More specifically, MPEP § 2106(II)(A) states, "The claimed invention as a whole must accomplish a practical application. That is, it must produce a 'useful, concrete and tangible result.' *State Street*, 149 F.3d at 1373, 47

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USPQ2d at 1601-02.” Furthermore, “Only when the claim is devoid of any limitation to a practical application in the technological arts should it be rejected under 35 U.S.C. 101.” (MPEP § 2106(II)(A))

This “two prong” test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the “technological arts.” The court developed a “technological arts” analysis:

The “technological” or “useful” arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it “enhances” the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the “technological art” because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the “mathematical exception” using the Freeman-Walter-Abele test has little, if any, application to

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determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a “useful, concrete and tangible result.” See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no “business method exception” since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that “[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112.” See *State Street Bank & Trust Co.* at 1377. Both of these analyses go towards whether the claimed invention is non-statutory because of the presence of an abstract idea. *State Street* never addressed the first part of the analysis, i.e., the “technological arts” test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) *was already determined to be within the technological arts* under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences in affirming a §101 rejection finding the claimed invention to be non-statutory for failing the technological arts test. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

What is indeed important to note in the *Bowman* decision is that the Board acknowledged the dichotomy of the analysis of the claims under 35 U.S.C. § 101, thereby emphasizing the fact that not only must the claimed invention produce a “useful, concrete and tangible result,” *but that it must also be limited to the technological arts* in order to be deemed statutory under the guidelines of 35 U.S.C. § 101. The Board very explicitly set forth this point:

[1] We agree with the examiner. Appellant has carefully avoided tying the disclosed and claimed invention to any technological art or environment. As noted by the examiner, the disclosed and claimed invention is directed to nothing more than a human

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making mental computations and manually plotting the results on a paper chart [answer, page 5]. The Examination Guidelines for Computer-Related Inventions are not dispositive of this case because there is absolutely no indication on this record that the invention is connected to a computer in any manner.

Despite the express language of 35 U.S.C. §101, several judicially created exceptions have been excluded from subject matter covered by Section 101. These exceptions include laws of nature, natural phenomenon, and abstract ideas. *See Diamond v. Diehr*, 450 U.S. 175, 185, 209 USPQ 1, 7(1981). We interpret the examiner's rejection as finding that the claimed invention before us is nothing more than an abstract idea because it is not tied to any technological art or environment. Appellant's argument is that the physical (even manual) creation of a chart and the plotting of a point on this chart places the invention within the technological arts.

The phrase "technological arts" has been created to offer another view of the term "useful arts." The Constitution of the United States authorizes and empowers the government to issue patents only for inventions, which promote the progress [of science and] the useful arts. We find that the invention before us, as disclosed and claimed, does not promote the progress of science and the useful arts, and does not fall within the definition of technological arts. The abstract idea, which forms the heart of the invention before us, does not become a technological art merely by the recitation in the claim of "transforming physical media into a chart" [sic, drawing or creating a chart] and "physically plotting a point on said chart."

In summary, we find that the invention before us is nothing more than an abstract idea, which is not tied to any technological art, environment, or machine, and is not a useful art as contemplated by the Constitution of the United States. The physical aspects of claim 1, which are disclosed to be nothing more than a human manually drawing a chart and plotting points on this chart, do not automatically bring the claimed invention within the technological arts. For all these reasons just discussed, we sustain the examiner's rejection of the appealed claims under 35 U.S.C. §101. *See Ex parte Bowman*, 61 USPQ2d (BNA) 1669, 1671 (BdPatApp&Int 2001)

Similarly, in the present application, claims 1-19, 26, 28, 35-40, 53-56 are deemed to be non-statutory because they are not limited to the technological arts; all recited steps could be

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performed manually by a human, thereby reinforcing the fact that Appellant's invention fails to "[p]romote the progress of science and useful arts," as intended by the United States Constitution under Art. I, §8, cl. 8 regarding patent protection.

In conclusion, the Examiner submits that Appellant's claims do not meet the technological arts requirement under 35 U.S.C. § 101, as articulated in *Musgrave*, *Toma*, and *Bowman* as well as the Manual of Patent Examining Procedure.

In response to applicant's argument regarding, the recitation of "computer-implemented method" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Therefore, the recitation of computer-implemented method in the preamble is considered as intended use of structure, therefore, it does not make the claim statutory.

The 101 Rejection is still maintained as shown above. The Applicant is once again being encouraged and advised to amend the claims so that the subject matter disclosed therein is statutory.

In response to applicant's argument regarding the rejection of 35 U.S.C. 102(e), Examiner would like to point out that the claim recites in the preamble "method for increasing the likelihood that a first low relevance promotion will be exercised by a consumer" (which is intended purpose), comprising the steps of receiving identification information ..., determining a

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category purchase history of the consumer, selecting a second promotion determined to be more relevant to the consumer and paring the low relevance and second (more relevant) promotion.

Deaton teaches providing different type of incentives including providing a lower discount (low relevance) for a product frequently purchased by a consumer (which is more relevant) to the consumer. Deaton teaches if consumer is know to purchase other brands (from purchase history) beside "Brand A", offering discount of "Brand A" to the consumer (see col. 115 line 15 to col. 116 line 34). Deaton teaches if the consumer does not exercise the discount a higher discount being provided, however if the consumer exercises the discount, no higher discount is provided. Which indicate that the lower discount is low relevance to the consumer.

Regarding the argument that the prior art does not teach, "promotion usage denominator related to a value of promotions exercised by the consumer" or "said promotion usage denominator relates to a location where promotions are exercised by said consumer", Examiner disagrees.

Deaton teaches products for which promotions are exercised, the value of promotions that are exercised, and/or location where promotions are exercised used to determine the relevancy of a promotion to the consumer, i.e., if the consumer does not exercises promotions that are low than such promotions can be classified as of low relevance to the consumer and the discount is increased. Deaton also teaches exchange of data between store for marketing purpose, which indicates that location would be considered (see col. 21 lines 35-45, col. 23 lines 30-40 and col. 115 line 4 to col. 116 line 34).

In response to applicant's argument regarding claim 7, the claim does not indicate non-customer database, which have not previously shopped.

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Regarding the argument that the prior art does not teach consumer as a pet owner, a parent etc., the claim reciting wherein the consumer comprises a pet ownership or parenthood and the promotion being a packaged goods industry, etc., does not patentably differentiate the invention from the prior art. However, Deaton teaches, as an example, consumer being a parent (see col. 114 lines 25-54) and packaged products, products being from different promoters, new product, etc., (see col. 115 lines 35 to col. 116 lines 67 and table 7). The prior art teaches products in general and consumers in general. Therefore, consumer being a pet owner or a parent and the promotion being for packaged products is inherent feature. Deaton also teaches a second and third promotion, i.e., the first lower discount and increased discount.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yehdega Retta whose telephone number is (703) 305-0436. The examiner can normally be reached on 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on (703) 305-8469. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Yehdega Retta
Primary Examiner
Art Unit 3622

YR